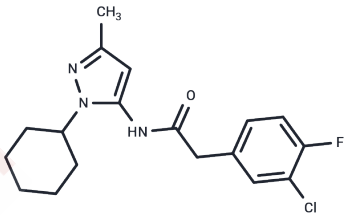
Data Sheet (Cat.No.T7899)

VU0810464

Chemical Properties



CAS No. : 2126040-21-7

Formula: C18H21ClFN3O

Molecular Weight: 349.83

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	VU0810464 is a non-ureaG protein-gated inwardly-rectifying potassium channels (GIRK, Kir3) activator.
Targets(IC50)	Potassium Channel
In vivo	Reduced stress-induced hyperthermia (SIH), a physiological test of anxiolytic efficacy in wild mice, but had no impact in and Kcnj3 (Girk1) ?/? mice.
Animal Research	Animal Model:Male C57BL/6J mice, Kcnj3?/? siblings female and male C57BL/6J mice. Dosage:10 mg/kg; 30mg/kg. Administration:Intraperitoneal injection

Solubility Information

Solubility	DMSO: 250 mg/mL (714.63 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (28.59 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (28.59 mM),Solution. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8585 mL	14.2927 mL	28.5853 mL
5 mM	0.5717 mL	2.8585 mL	5.7171 mL
10 mM	0.2859 mL	1.4293 mL	2.8585 mL
50 mM	0.0572 mL	0.2859 mL	0.5717 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Discovery and Characterization of 1H-Pyrazol-5-yl-2-phenylacetamides as Novel, Non-Urea-Containing GIRK1/2 Potassium Channel Activators[J]. Acs Chemical Neuroscience, 2017, 8(9):1873-1879.
Vo BN, et al. VU0810464, a non-urea G protein-gated inwardly rectifying K+ (Kir 3/GIRK) channel activator, exhibits enhanced selectivity for neuronal Kir 3 channels and reduces stress-induced hyperthermia in mice.Br J Pharmacol. 2019 Jul;176(13):2238-2249.

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